



1/34

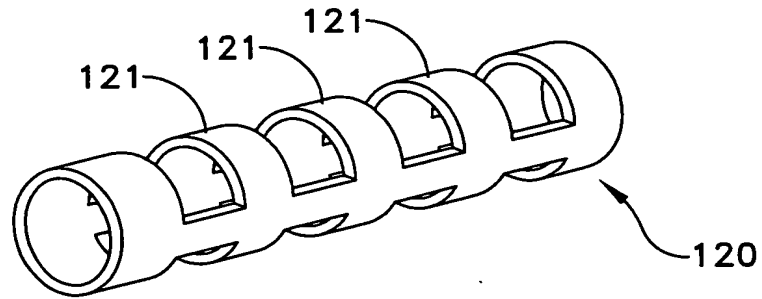


FIG. 1A

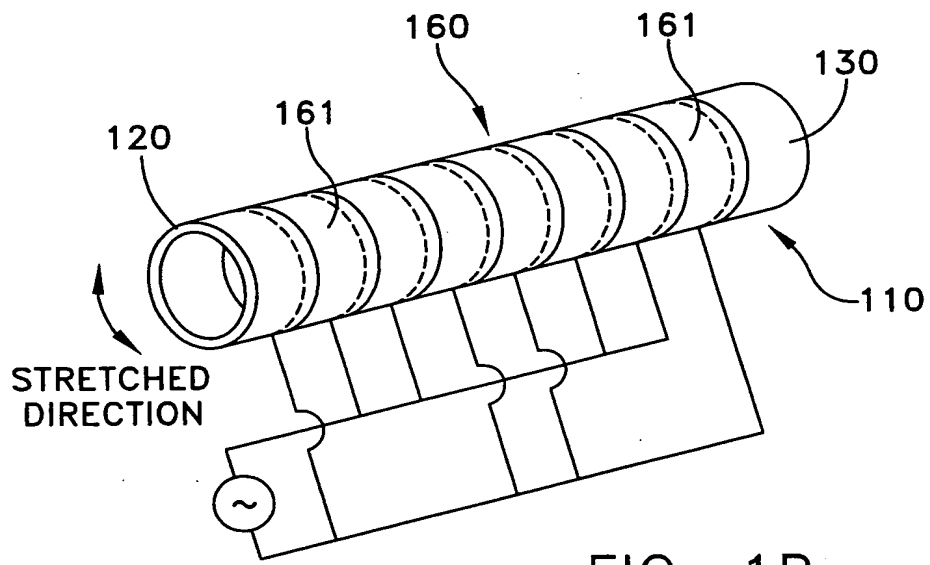


FIG. 1B

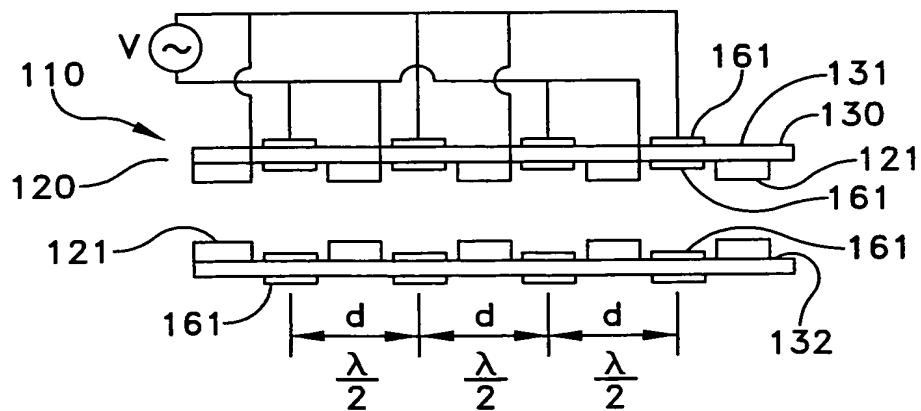


FIG. 1C

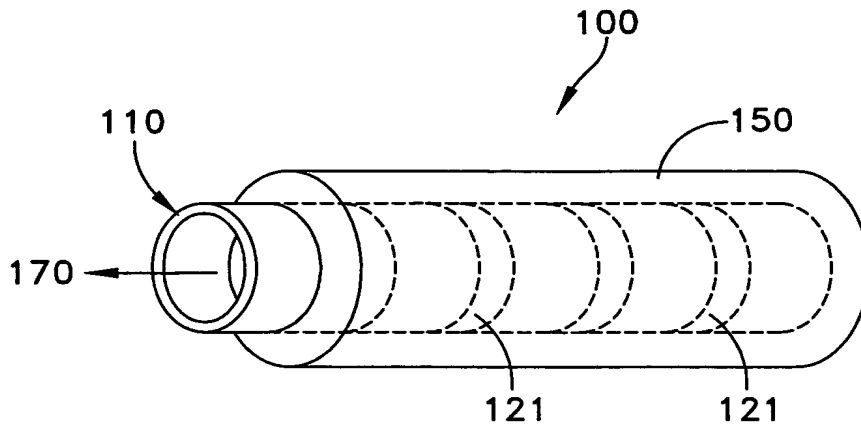


FIG. 1D

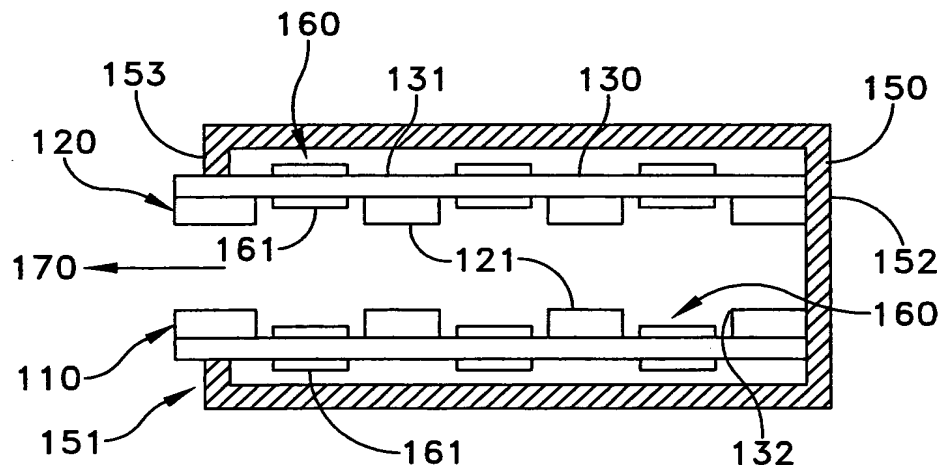


FIG. 1E

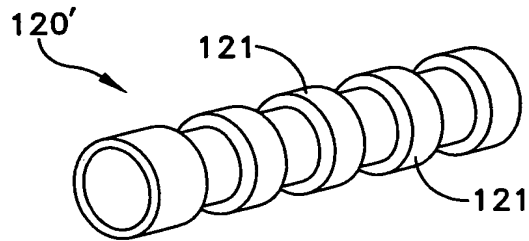


FIG. 2A

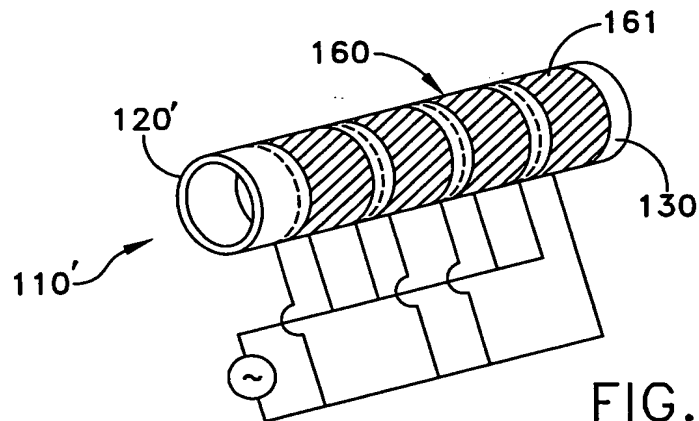


FIG. 2B

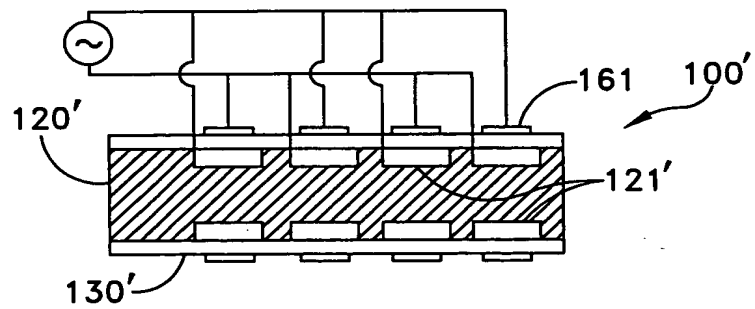


FIG. 2C

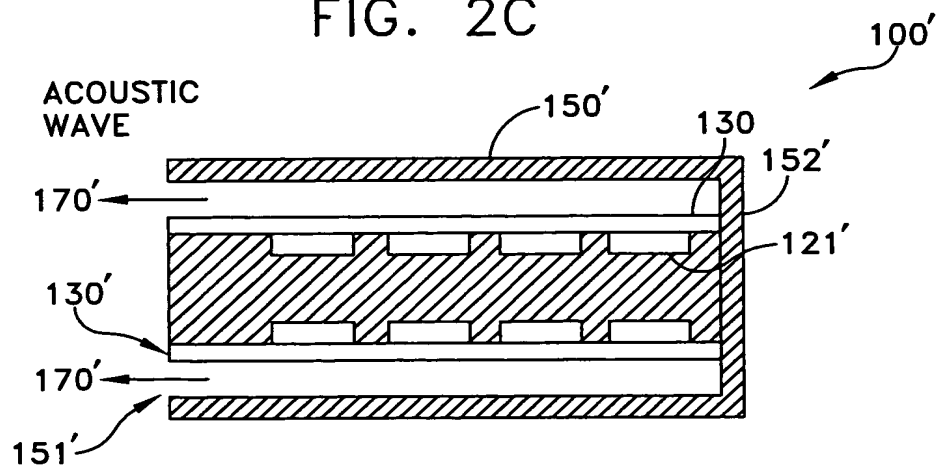
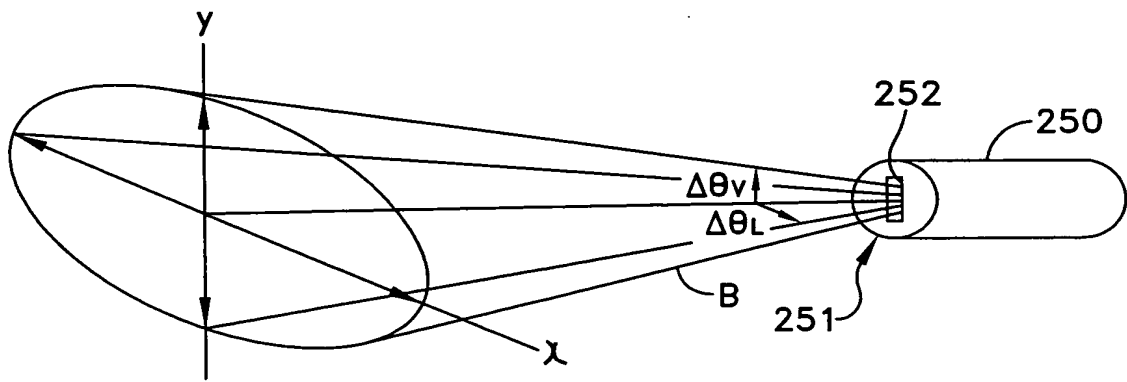
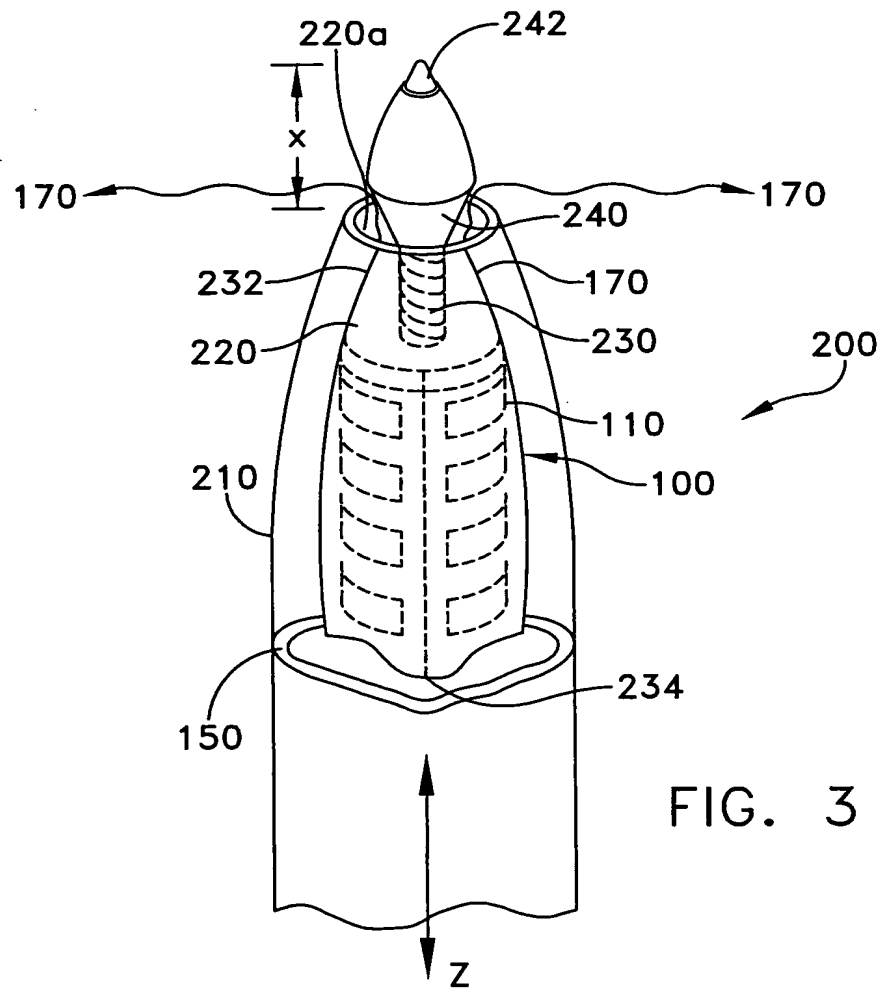


FIG. 2D



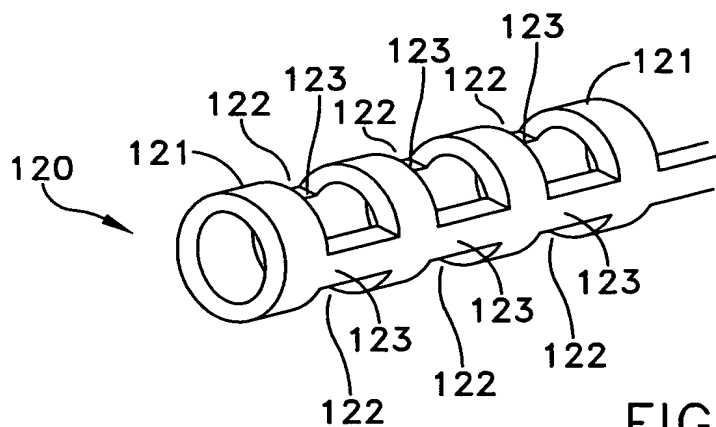


FIG. 5A

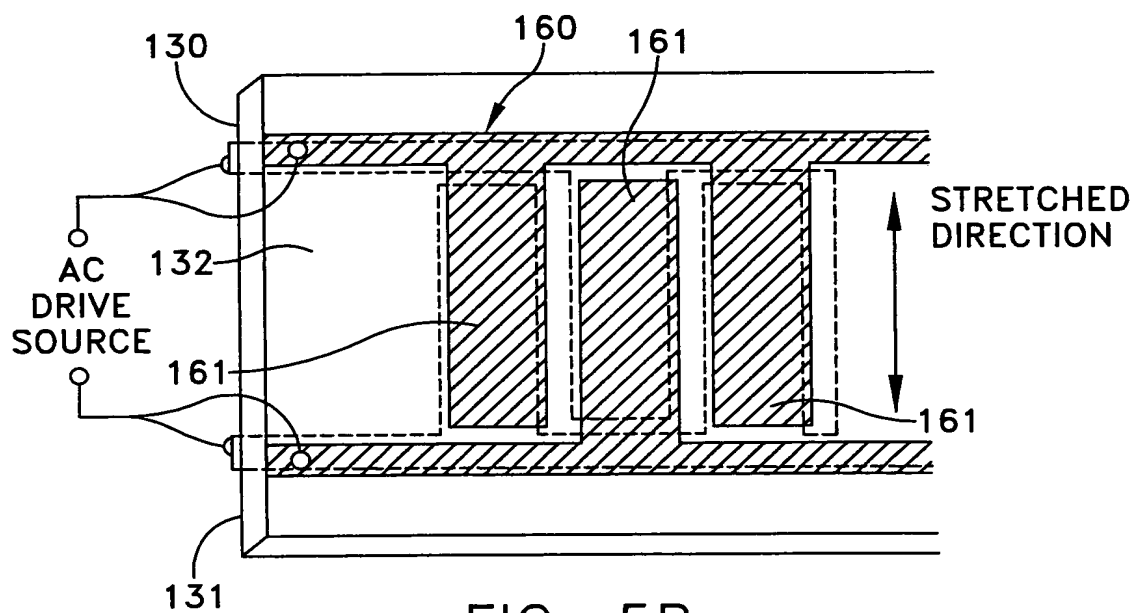


FIG. 5B

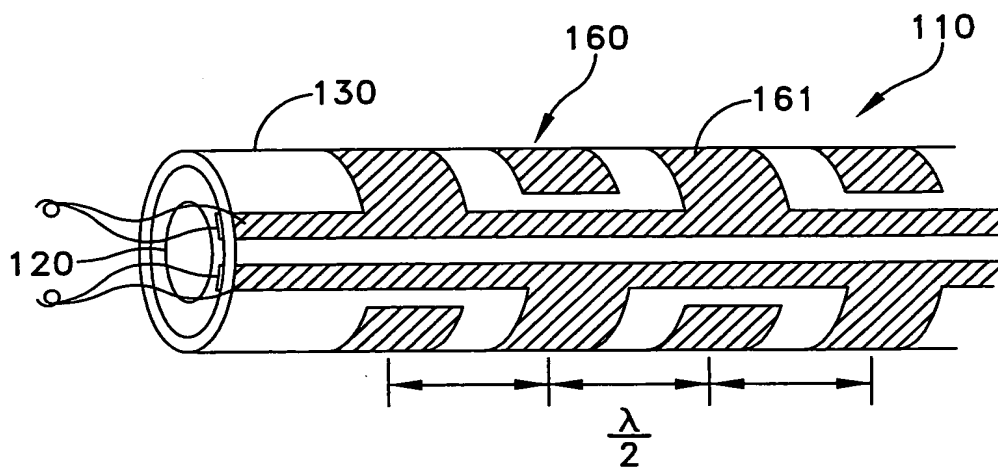


FIG. 5C

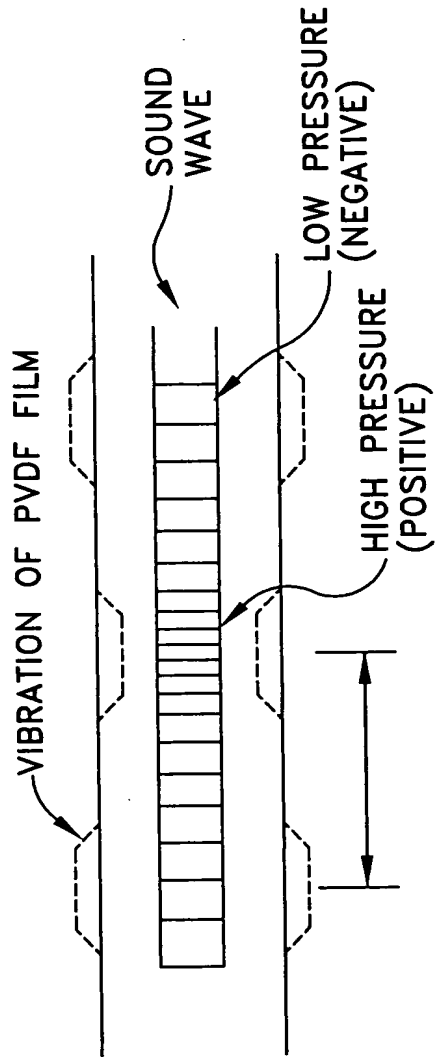


FIG. 6

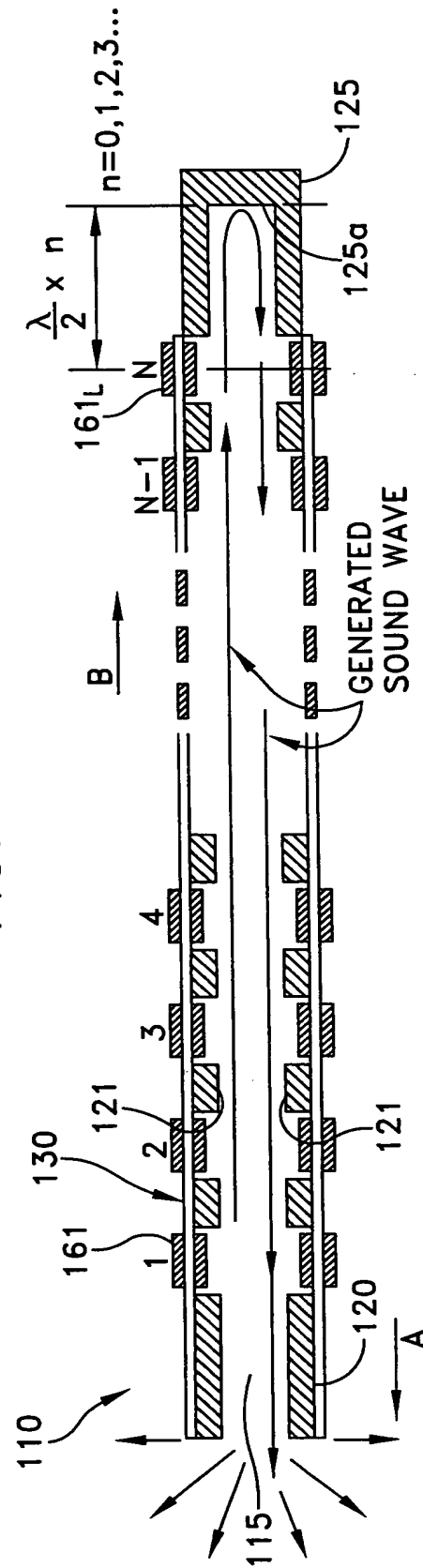


FIG. 7

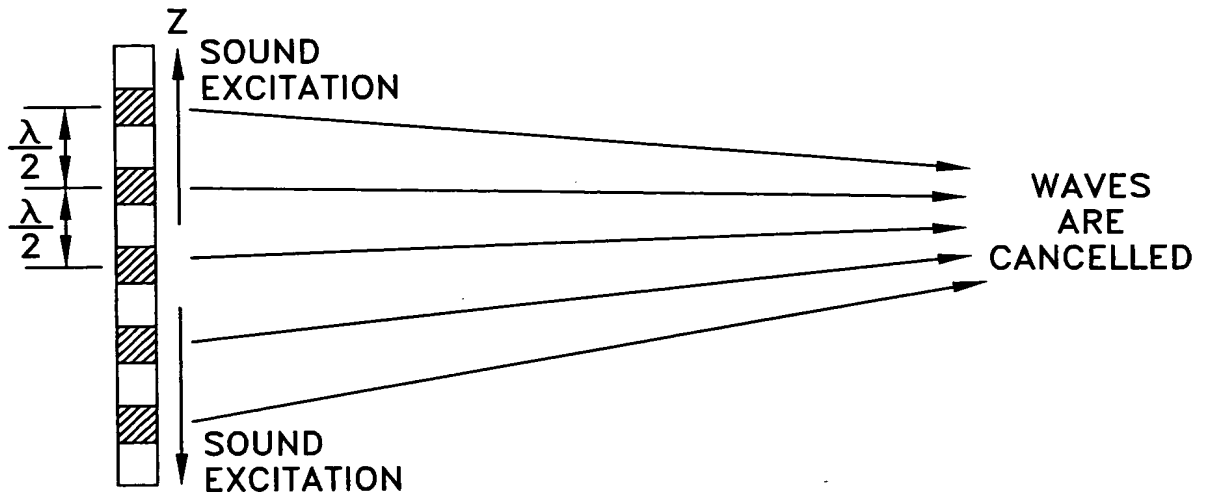


FIG. 8

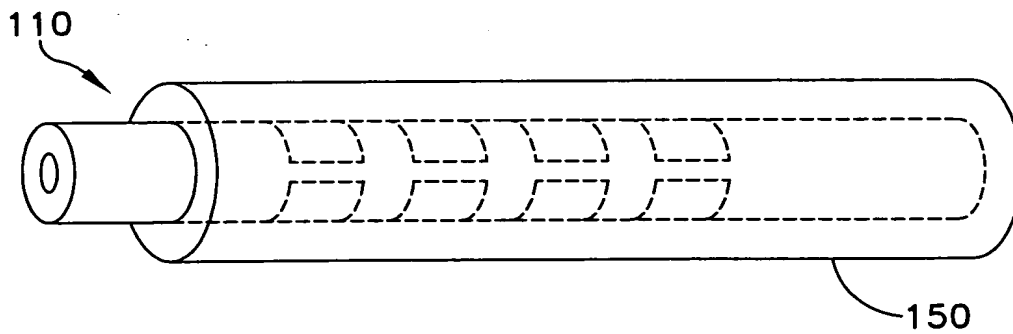


FIG. 9

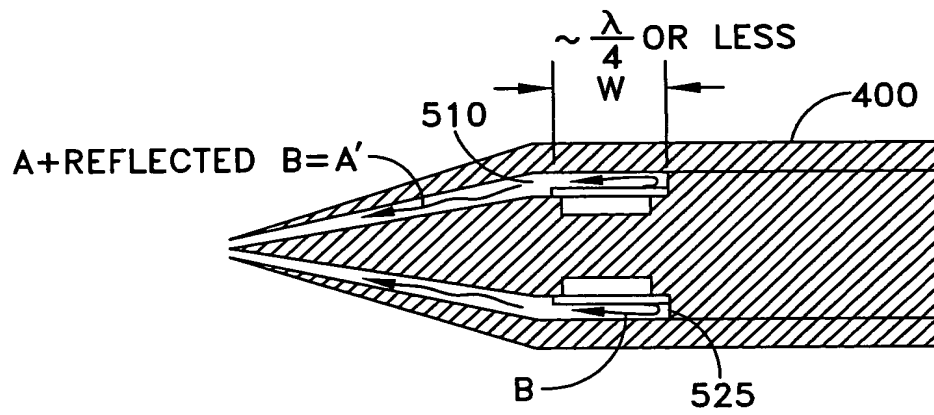


FIG. 10C

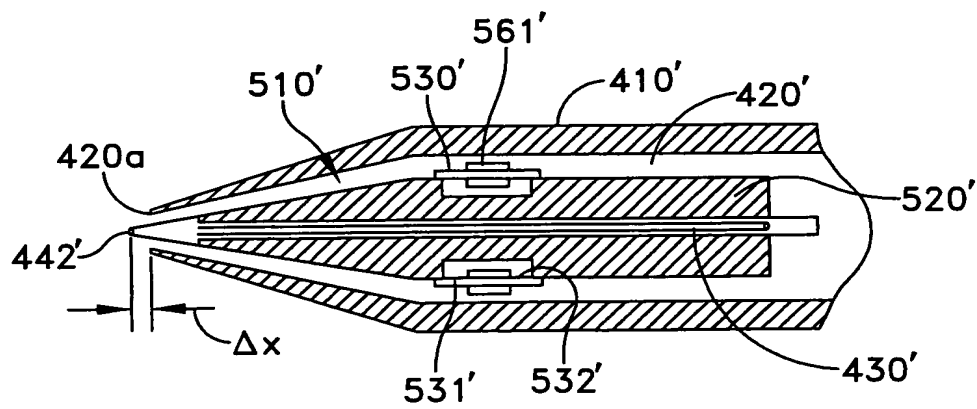


FIG. 10D

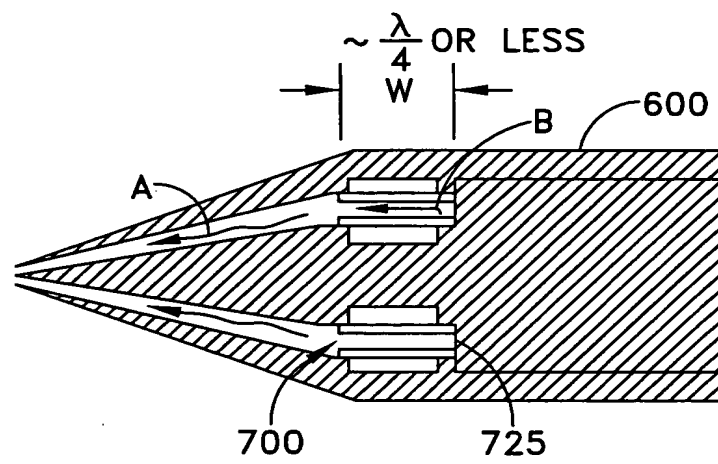


FIG. 11D

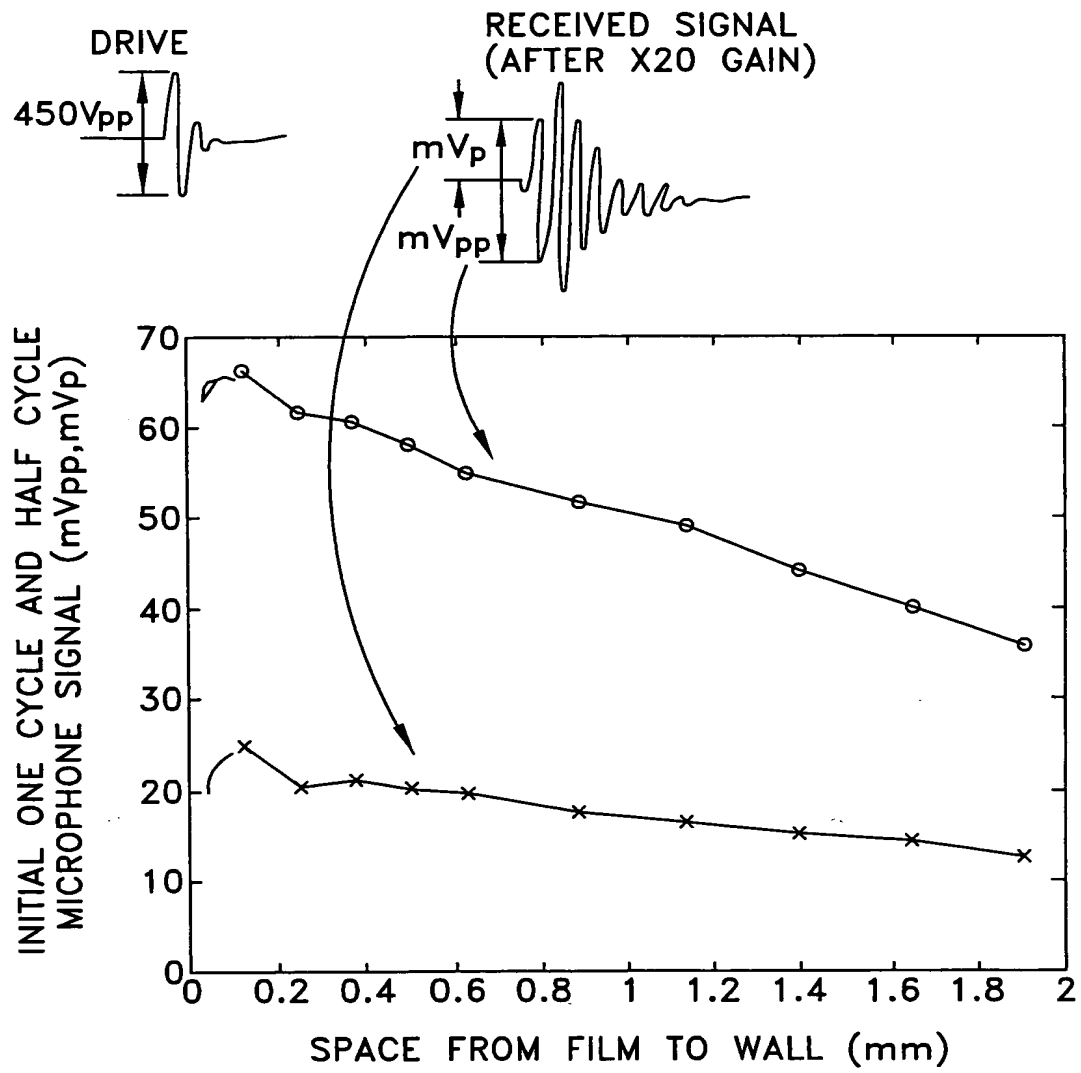


FIG. 12

32Vpp 20 CYCLE BURST, SIGNAL mVpp FROM X20 AMPLIFIER,
B&K MICROPHONE(3.4mV/Pa), 12.5cm

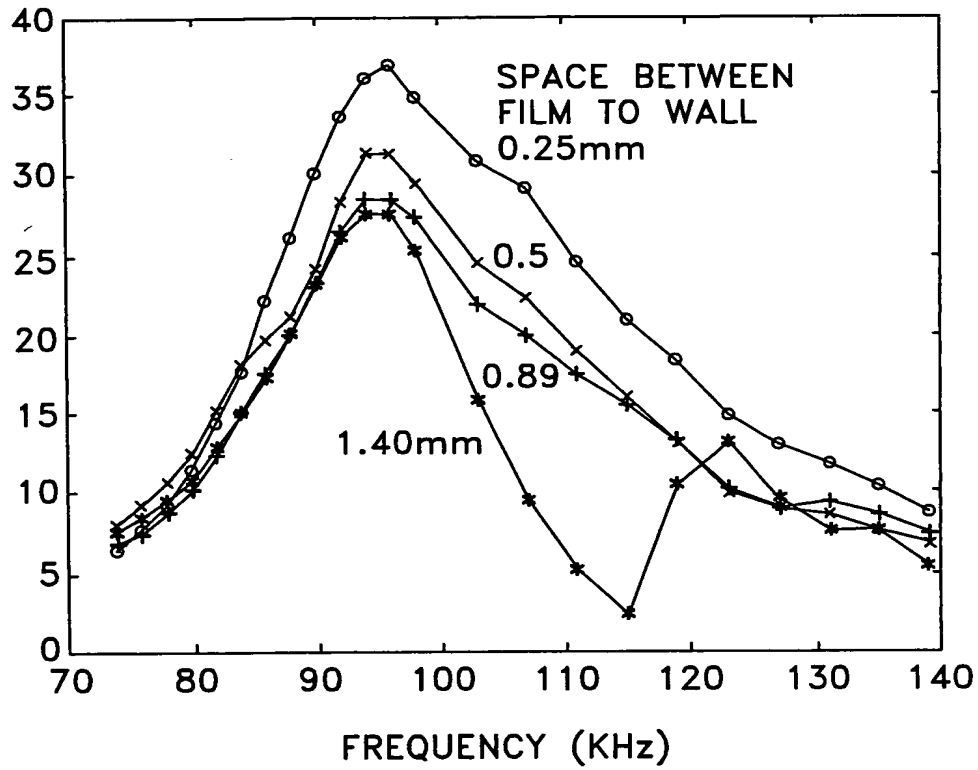


FIG. 13A

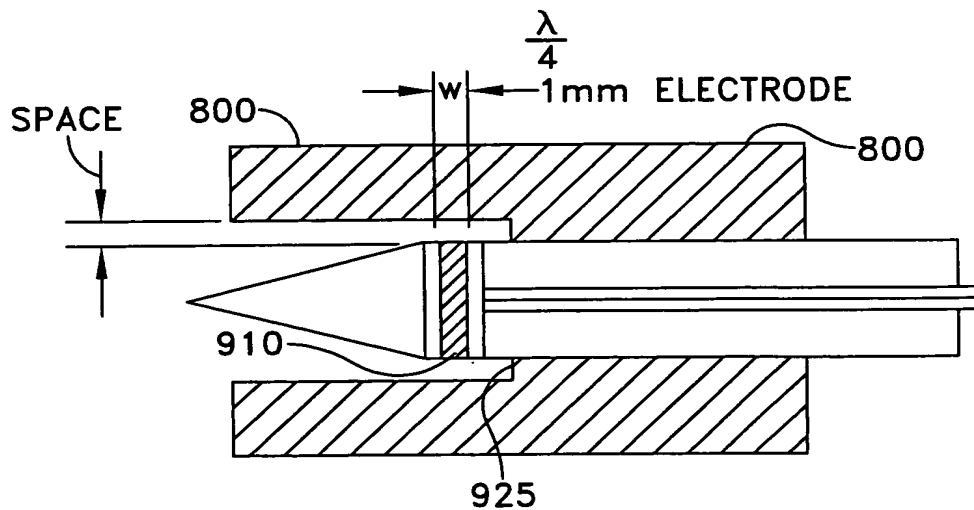


FIG. 13C

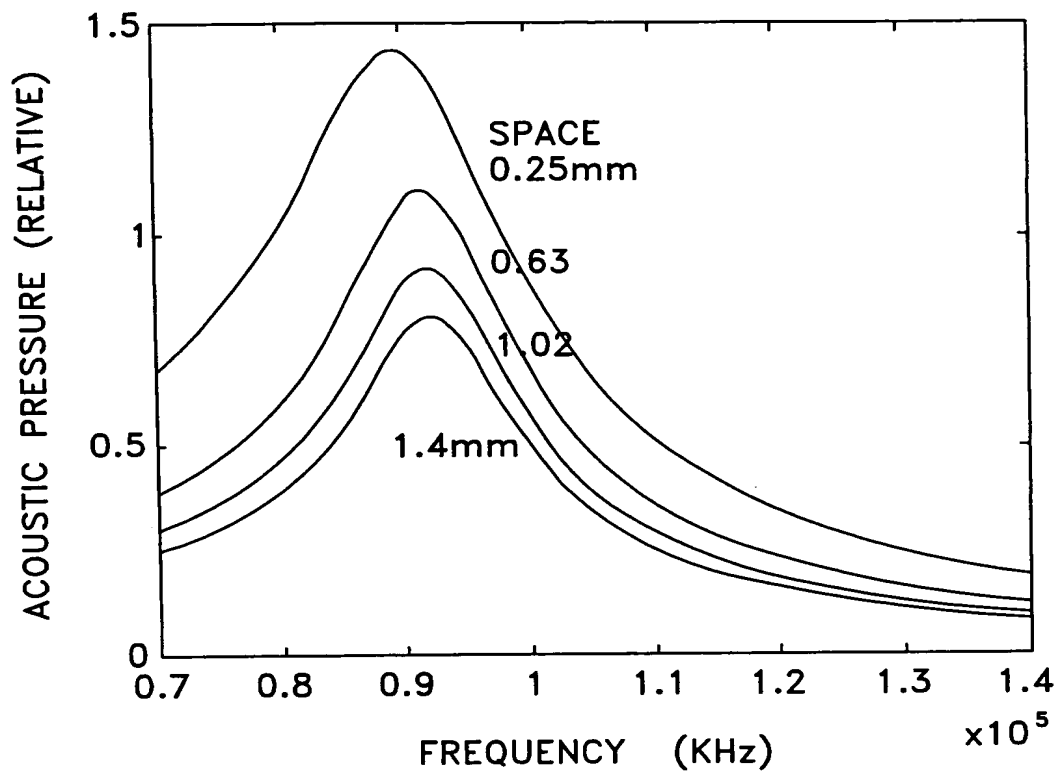


FIG. 13B

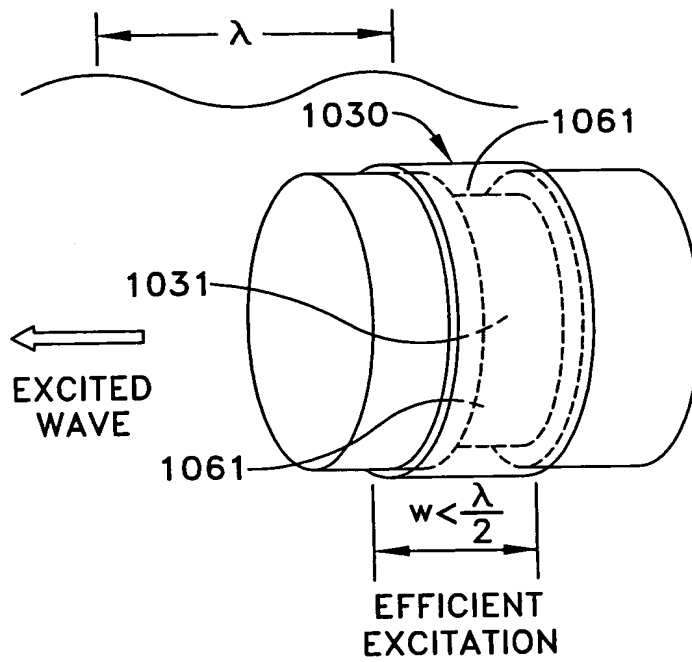


FIG. 14A

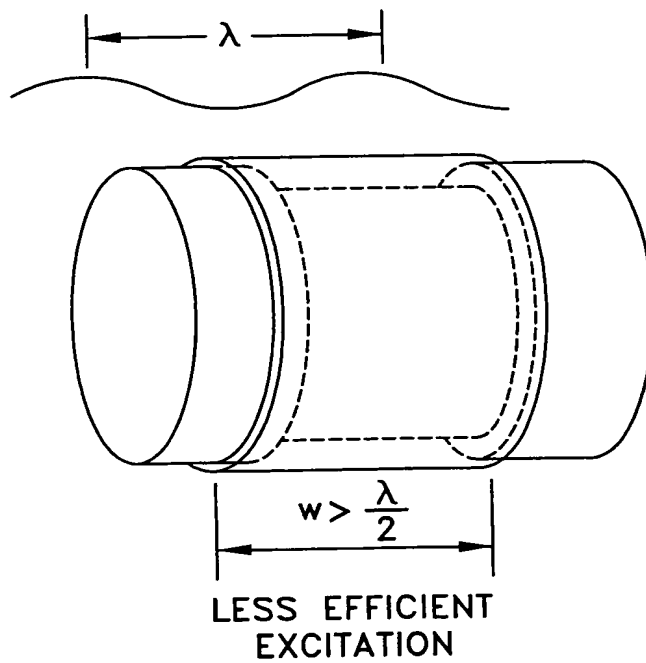


FIG. 14B

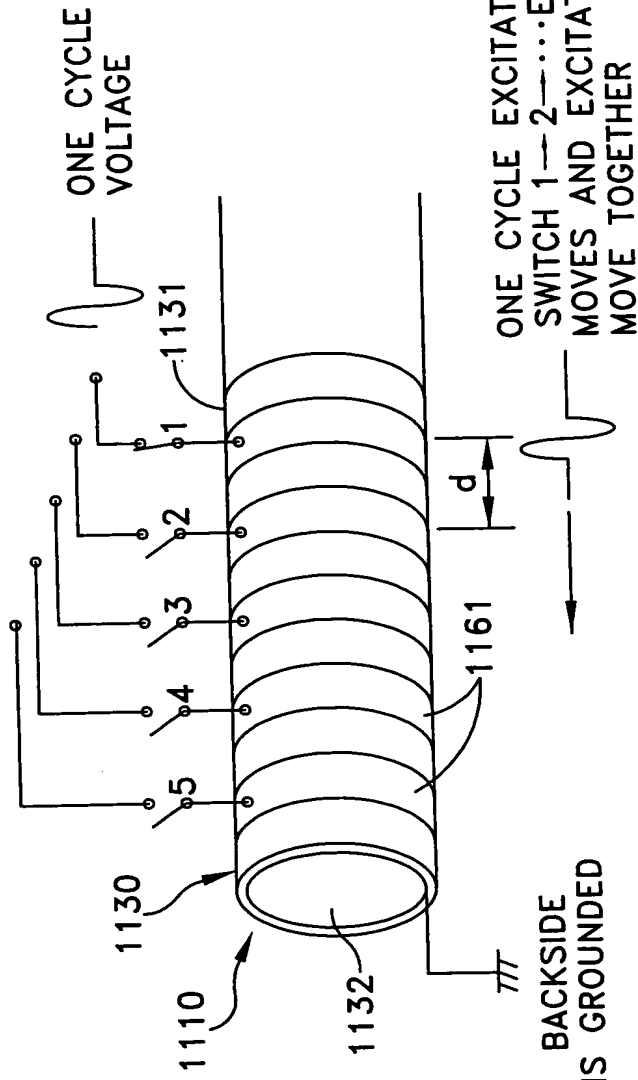


FIG. 15

ONE CYCLE EXCITATION IS MOVED BY SWITCH 1→2→...EXCITED WAVE MOVES AND EXCITATION VOLTAGE ALSO MOVE TOGETHER

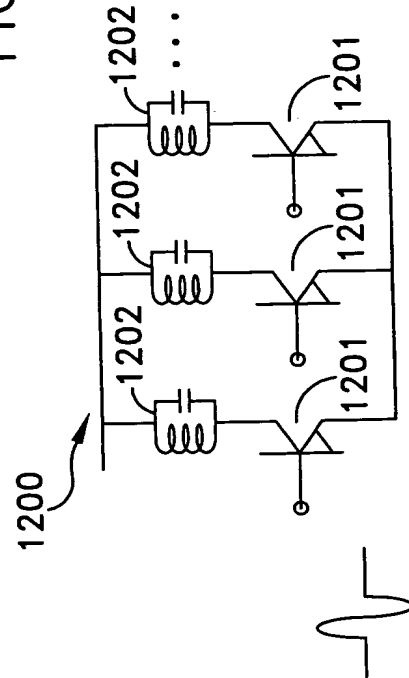


FIG. 16

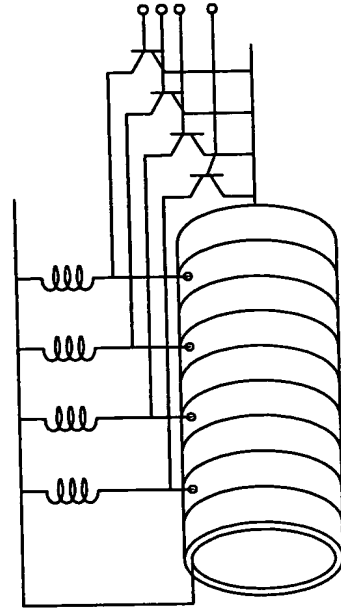


FIG. 17

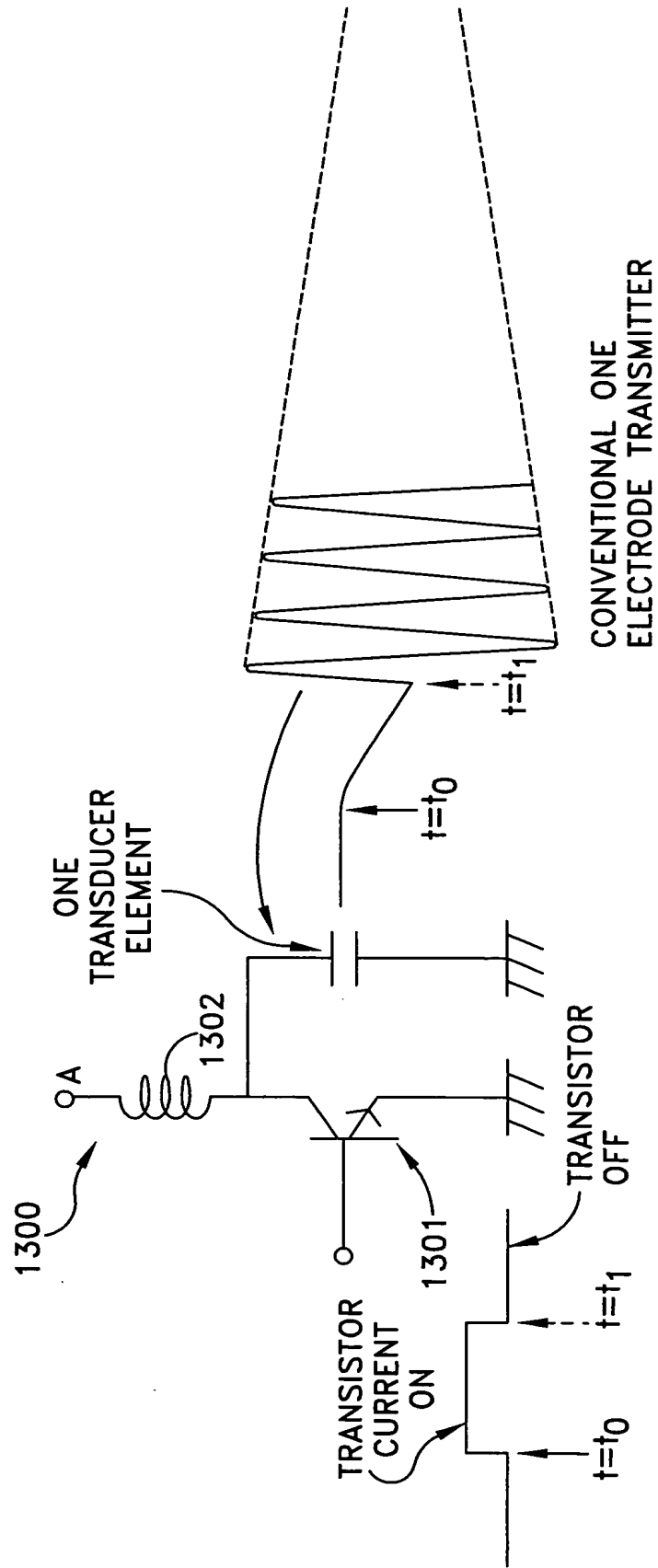


FIG. 18

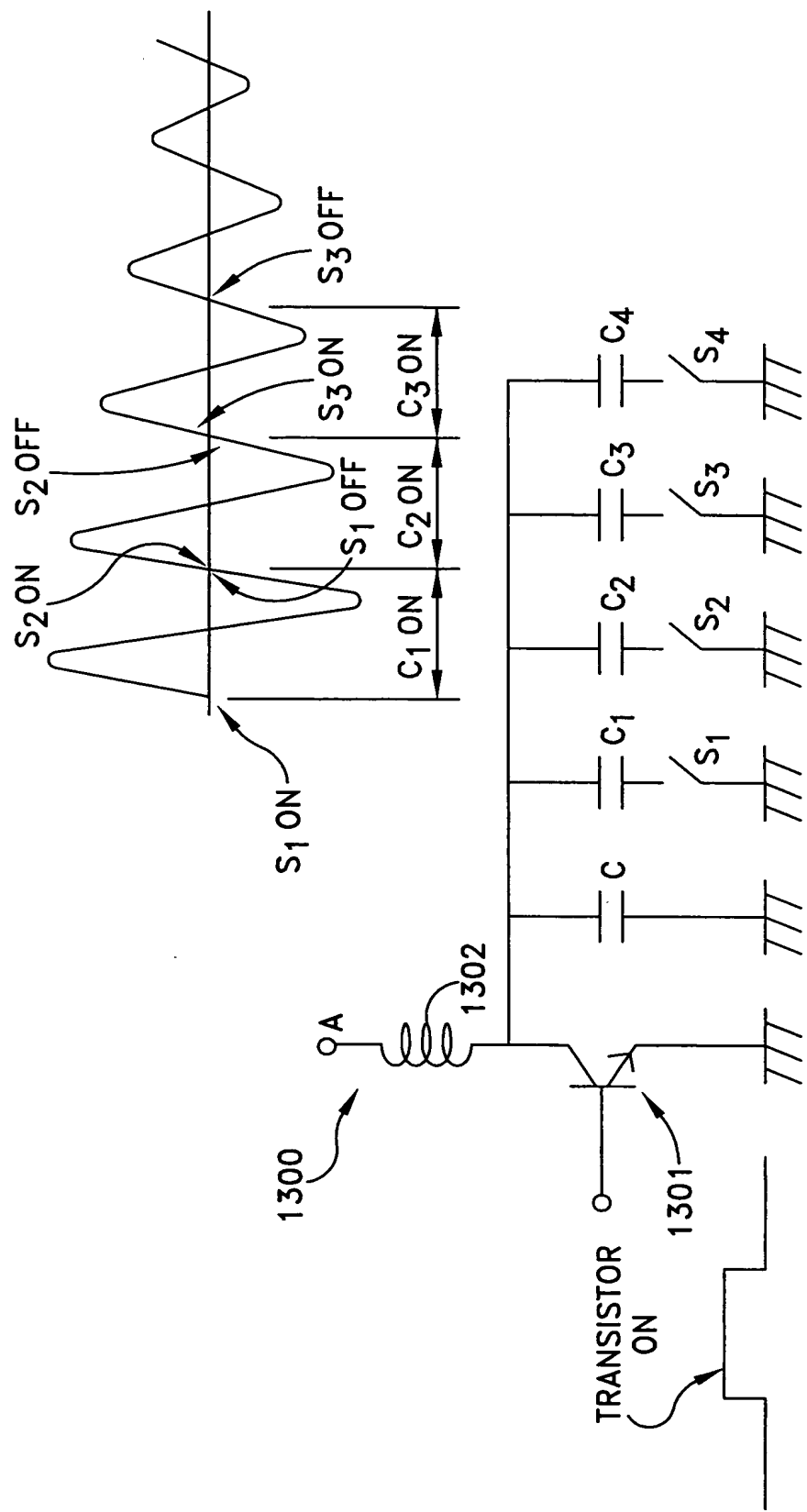


FIG. 19

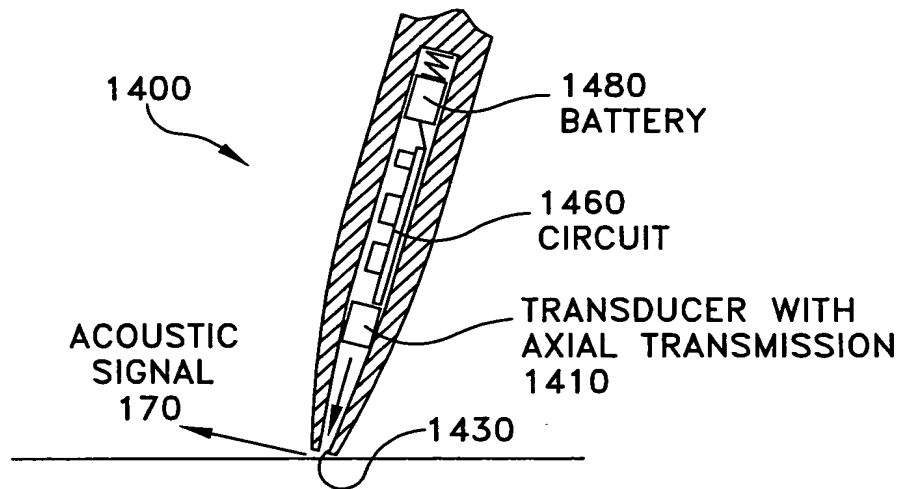
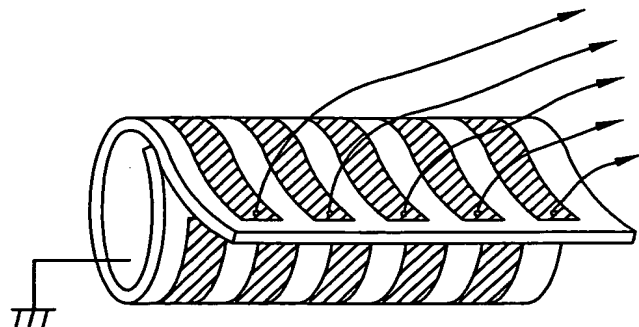
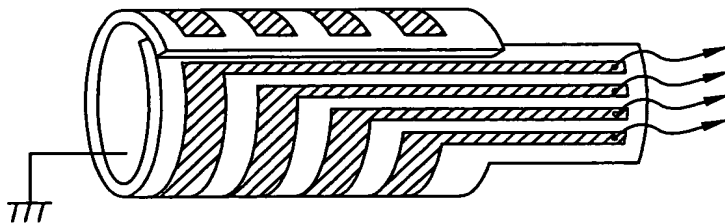
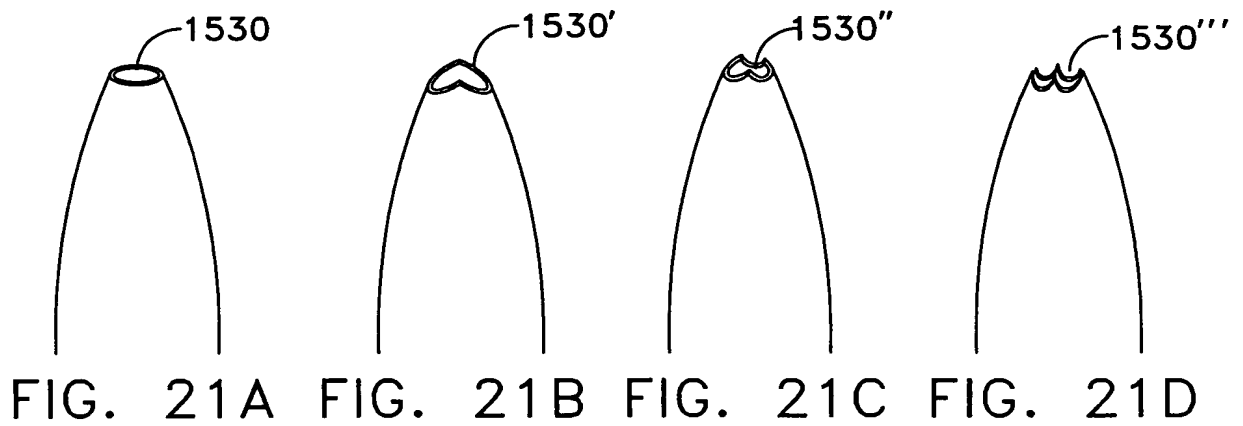


FIG. 20



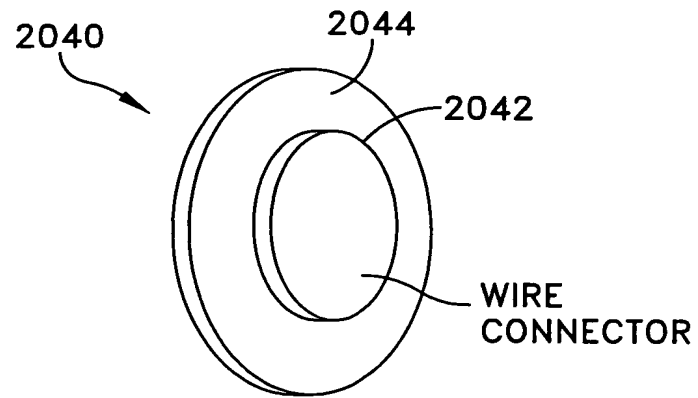


FIG. 24A

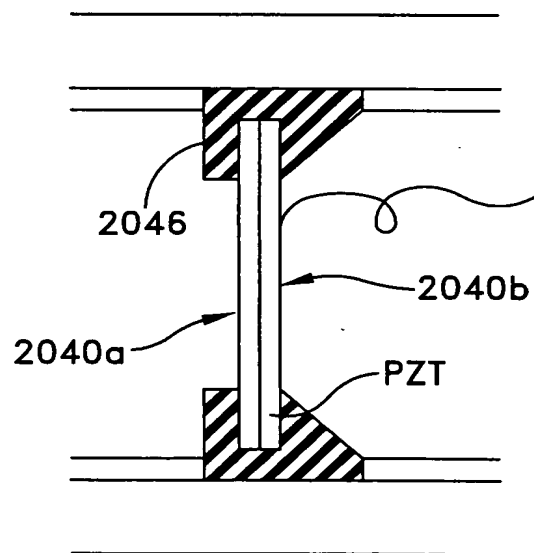


FIG. 24B

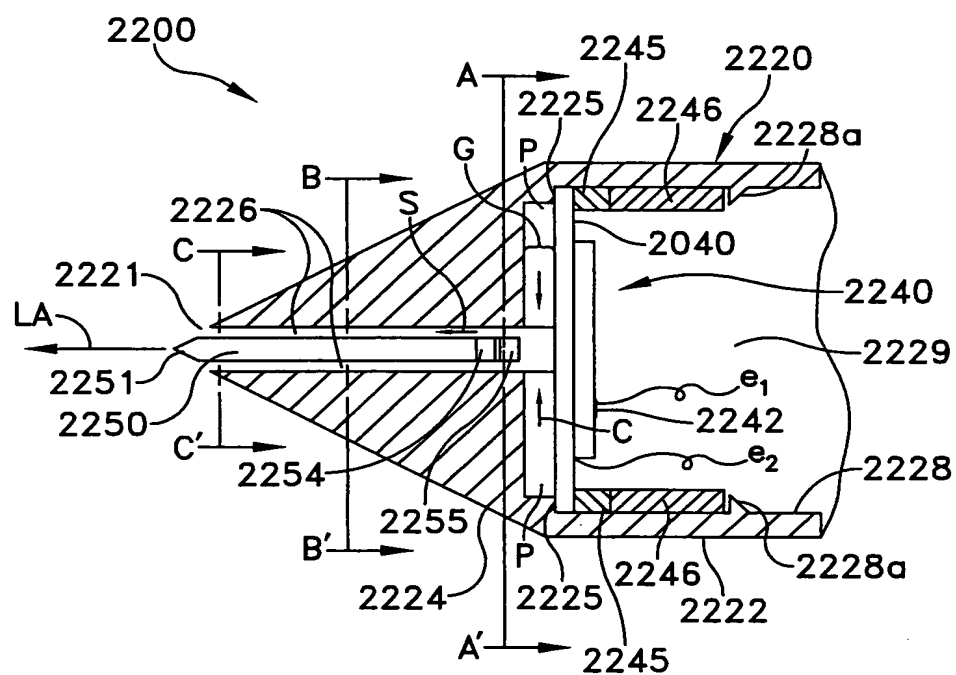
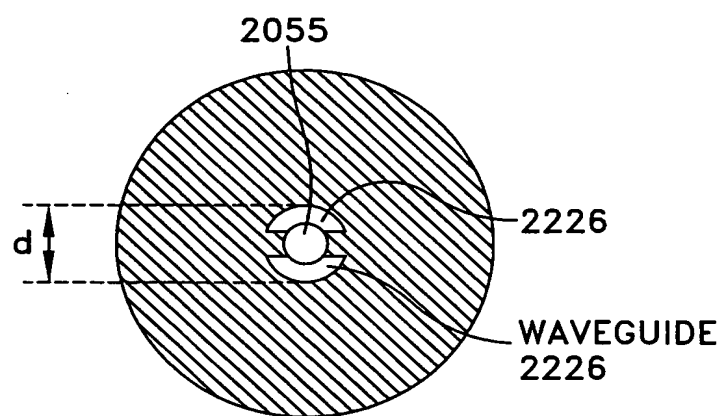
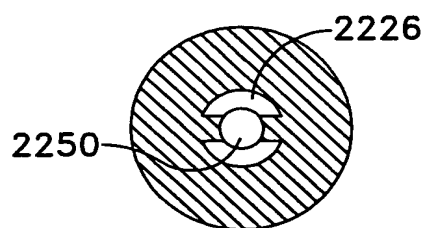


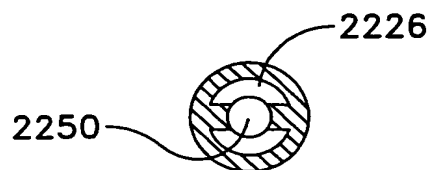
FIG. 25A



A-A'
FIG. 25B



B-B'
FIG. 25C



C-C'
FIG. 25D

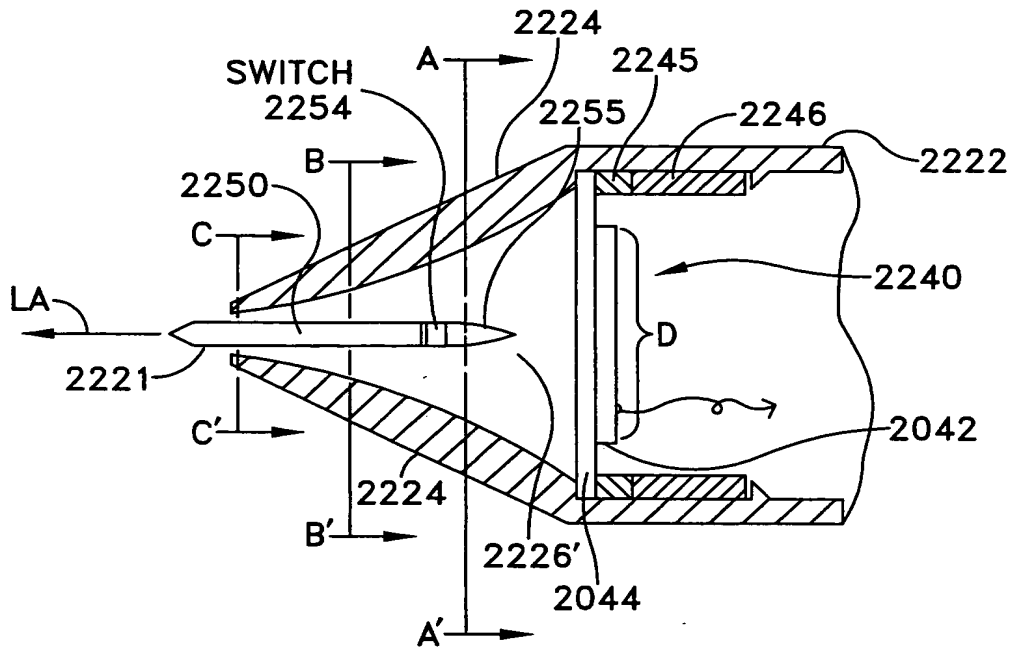


FIG. 26A

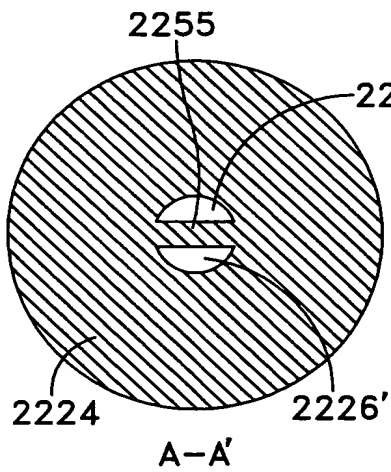


FIG. 26B

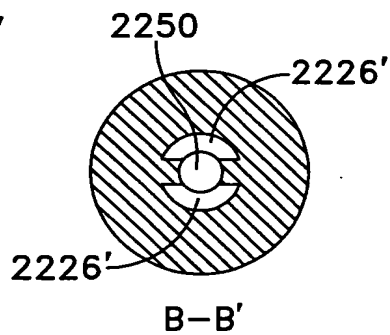


FIG. 26C

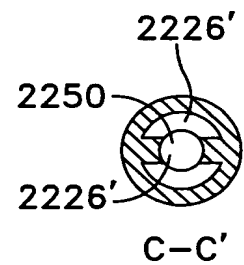


FIG. 26D

2040

2044

PZT 2042

FIG. 27B

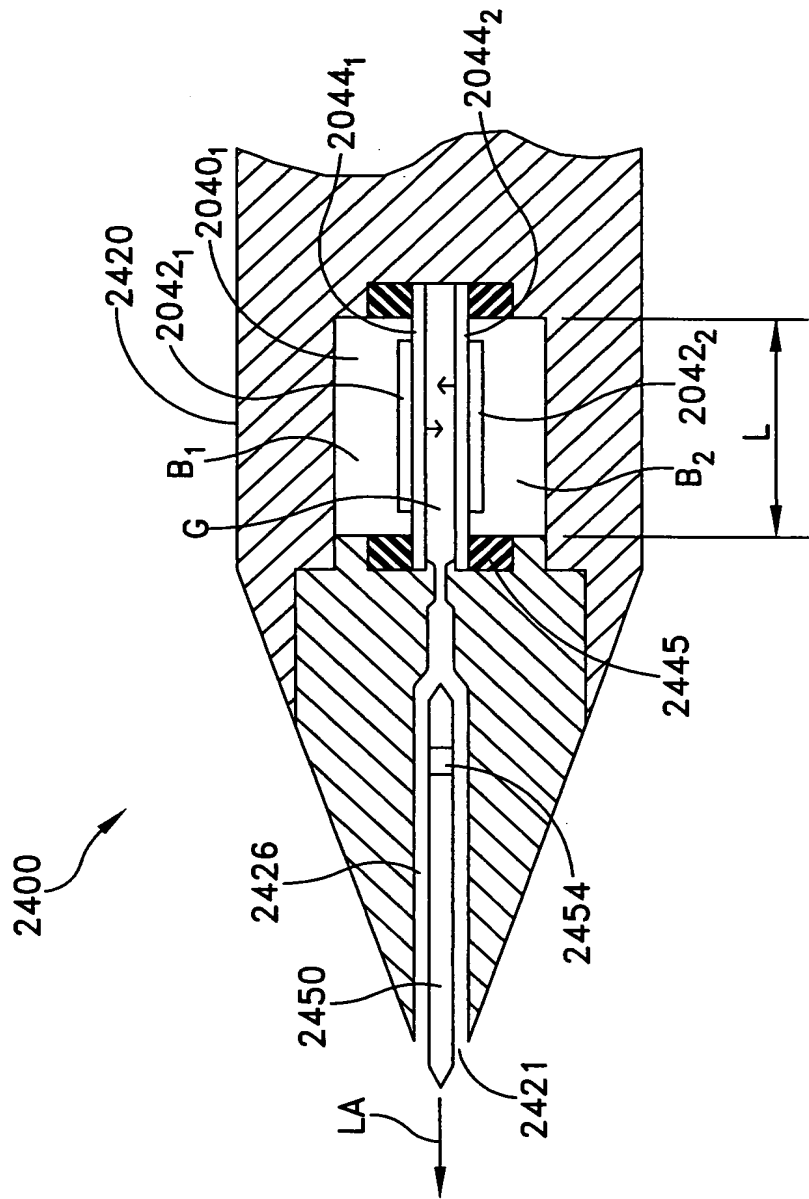
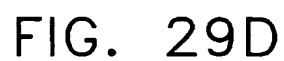
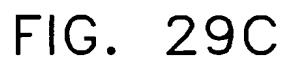
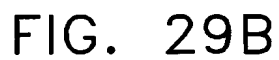
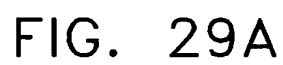


FIG. 28



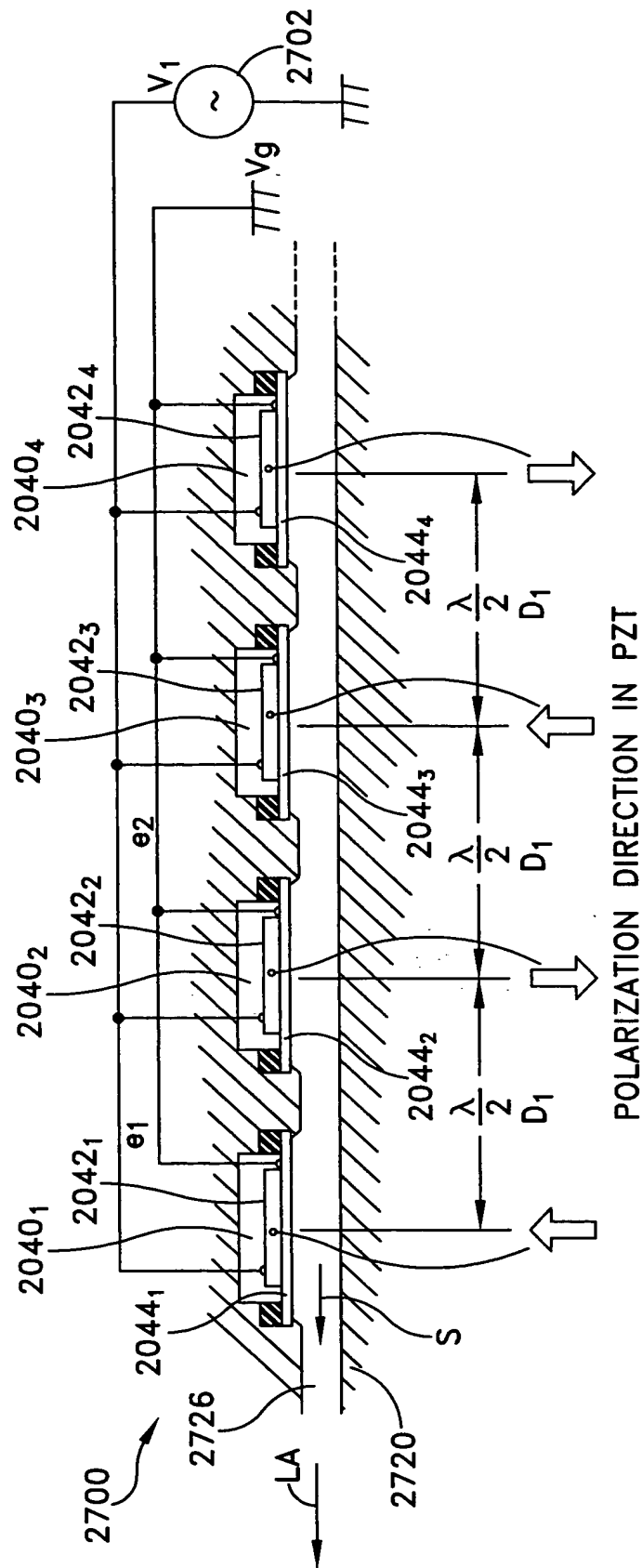


FIG. 31A

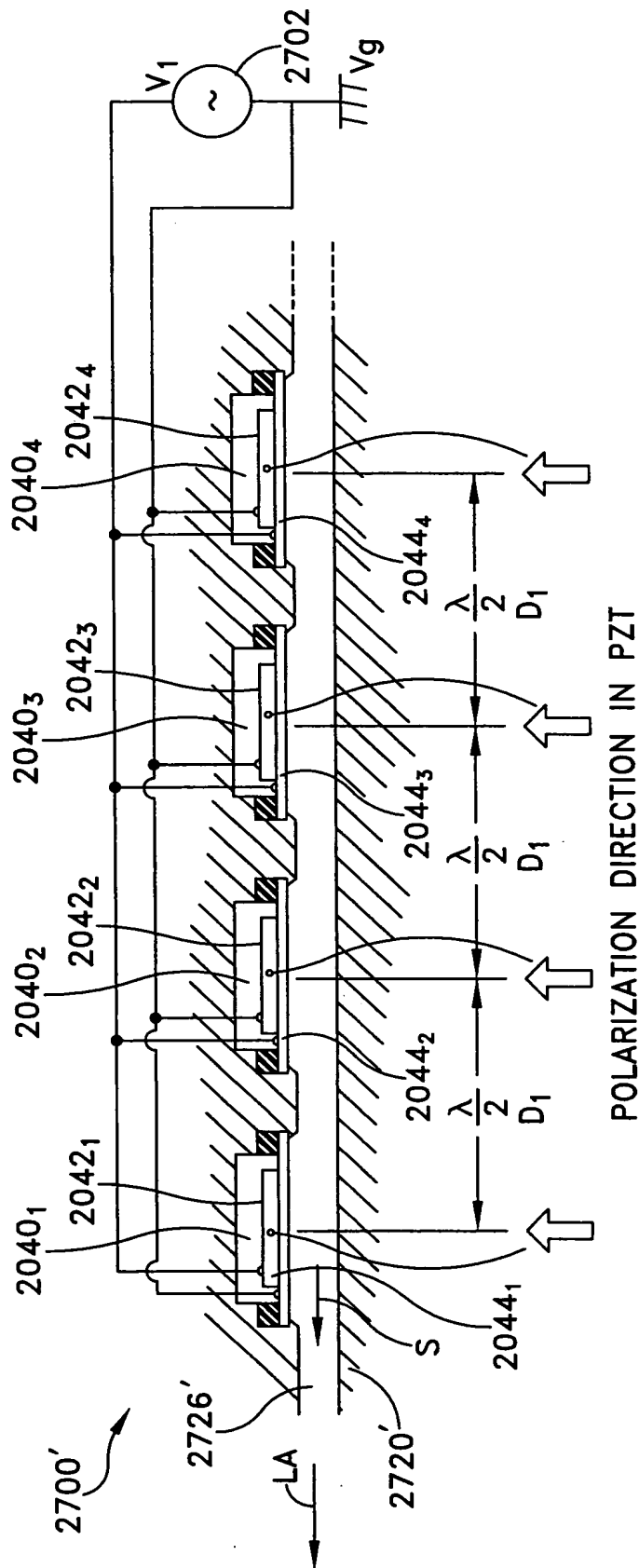


FIG. 31B

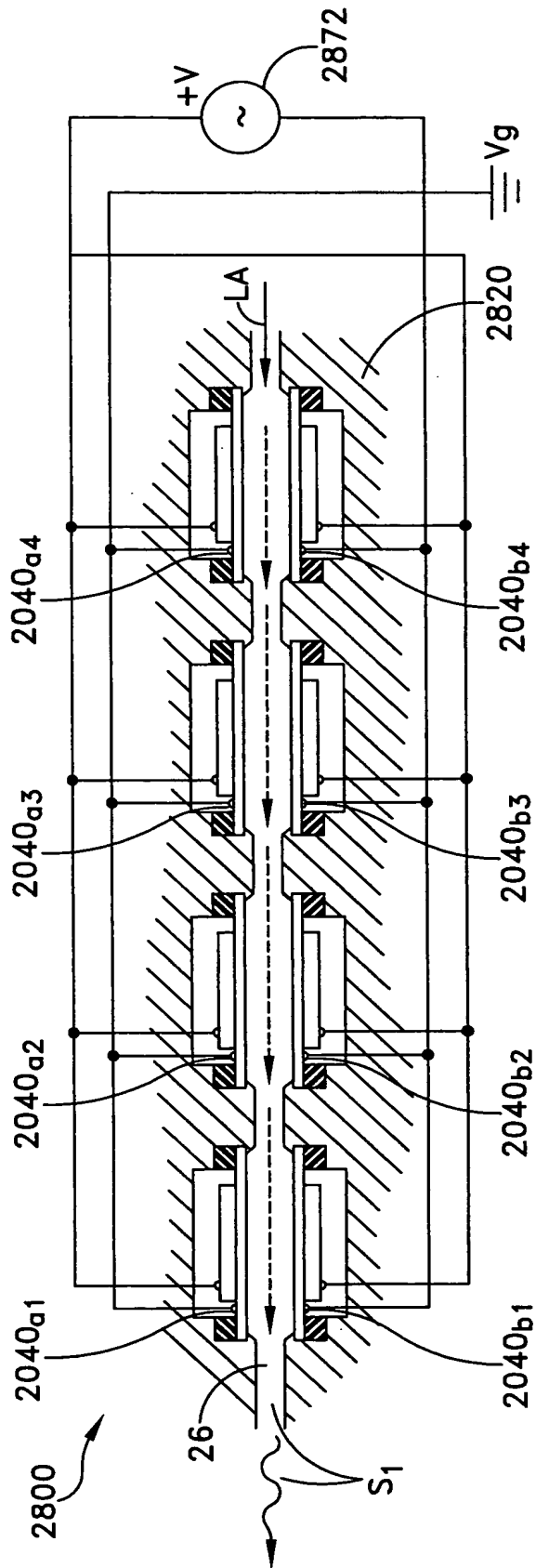


FIG. 32A

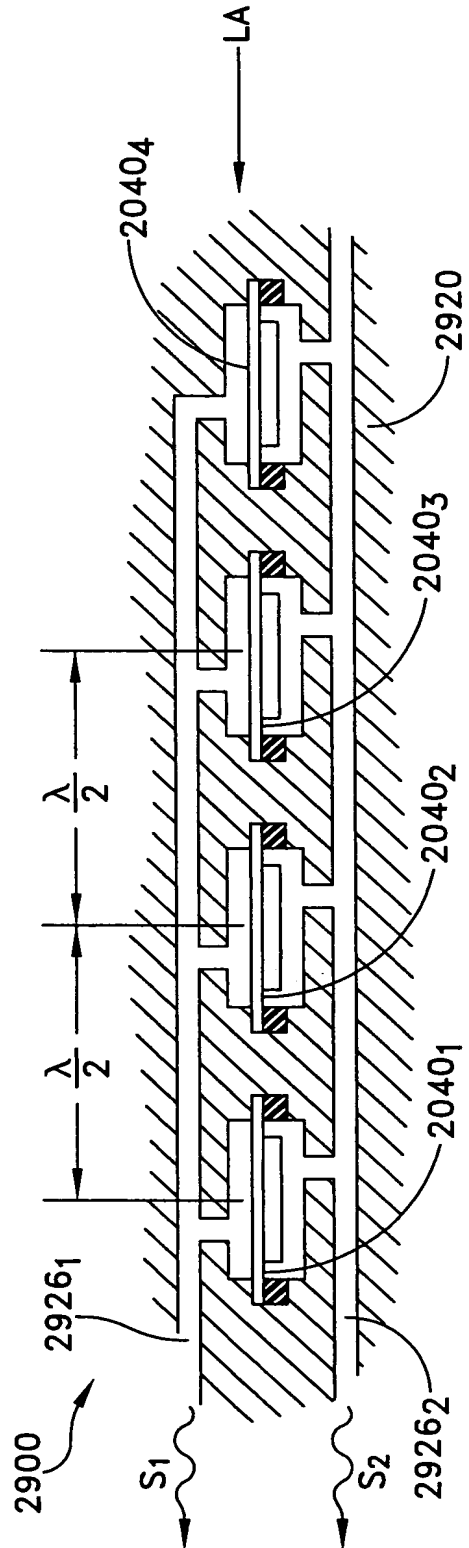


FIG. 32B

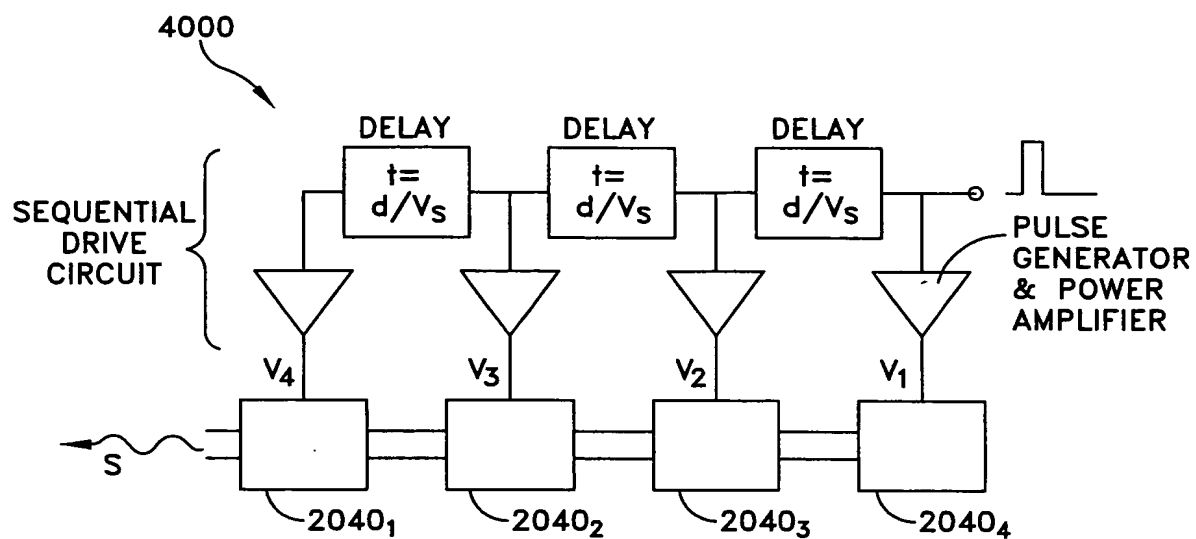


FIG. 33

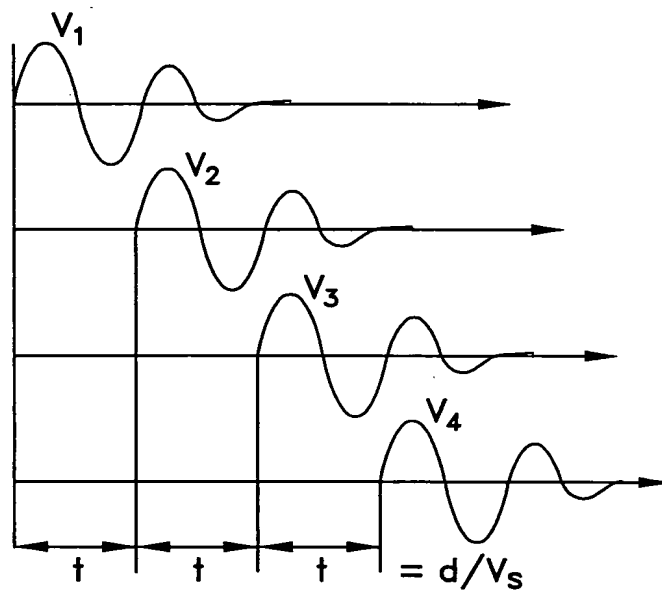


FIG. 34

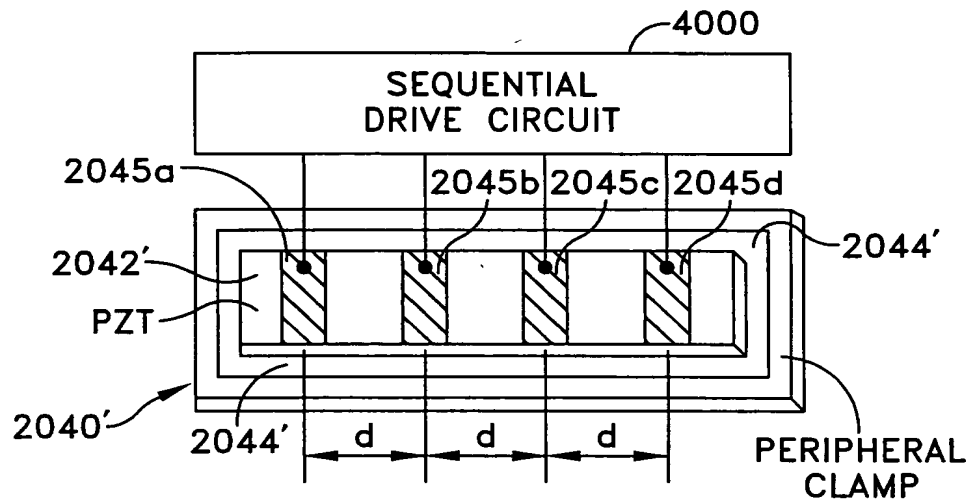


FIG. 35

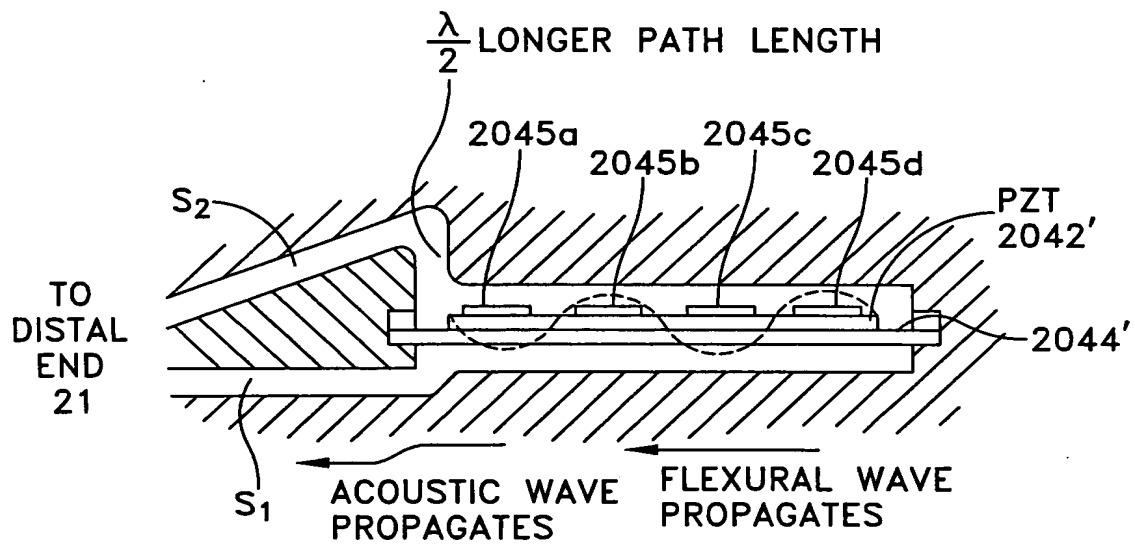


FIG. 36

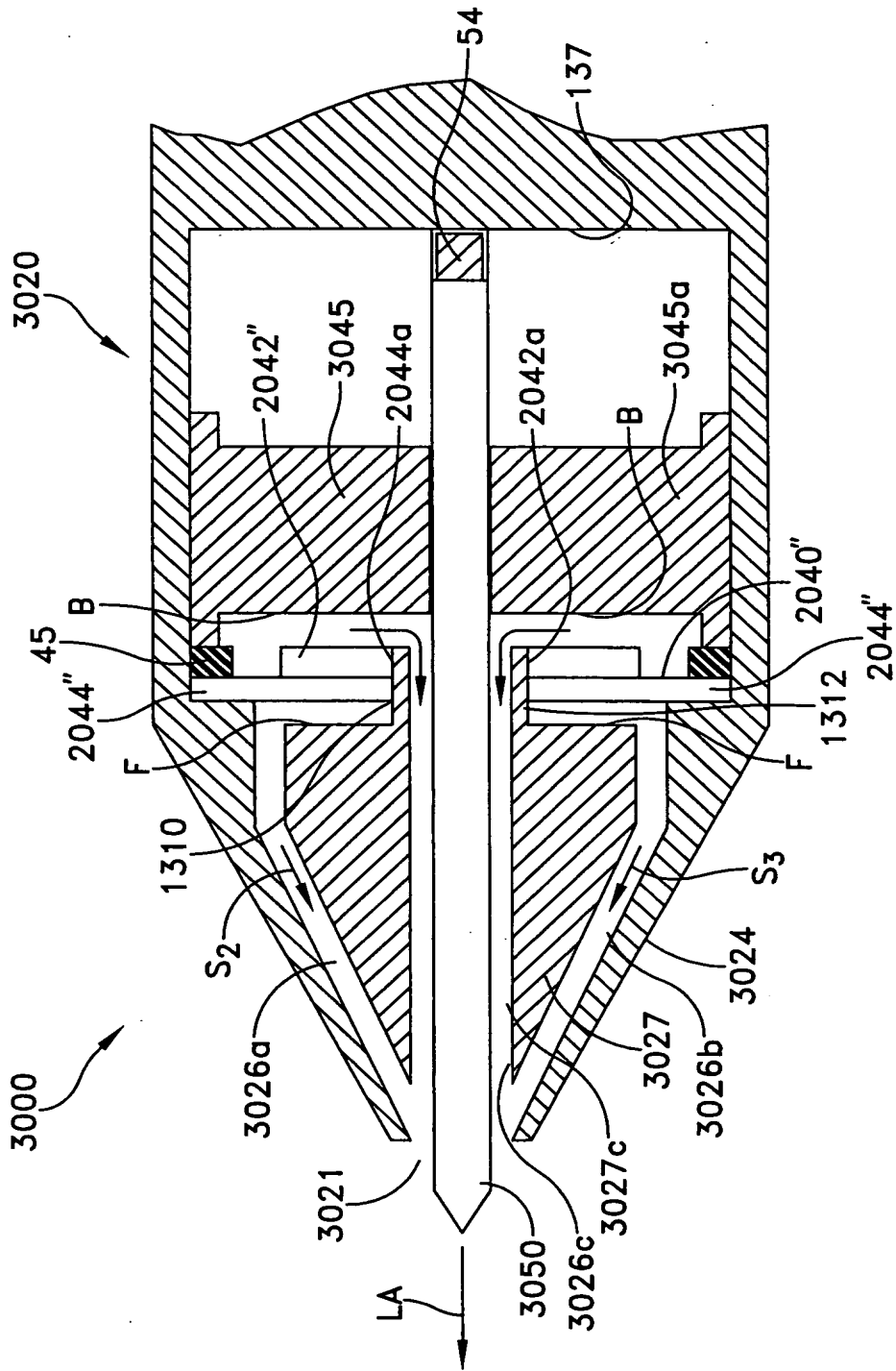


FIG. 37

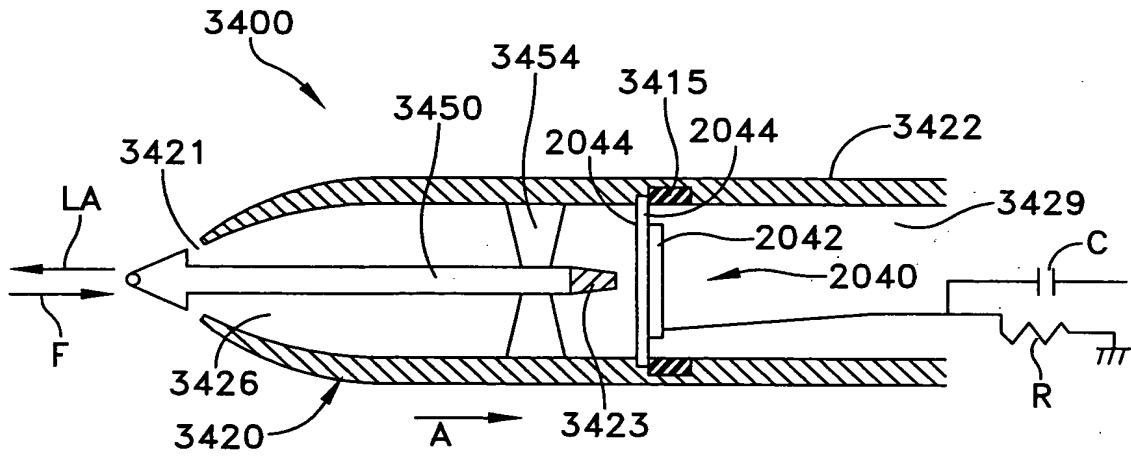


FIG. 38

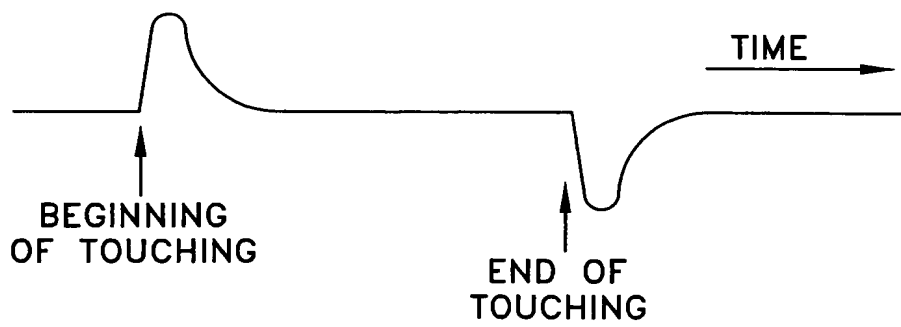


FIG. 39

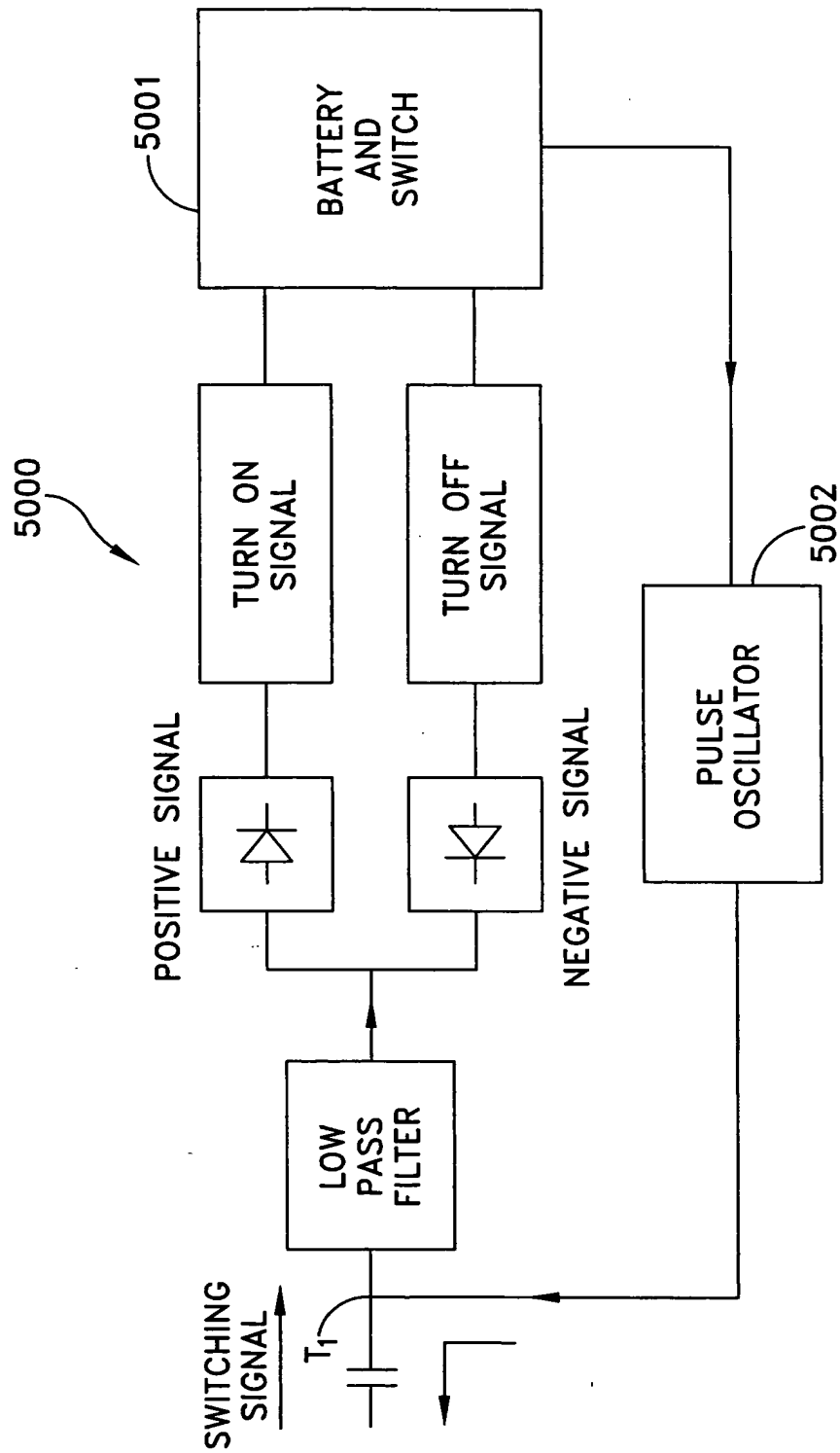


FIG. 40